PATENT ABSTRACTS OF JAPAN

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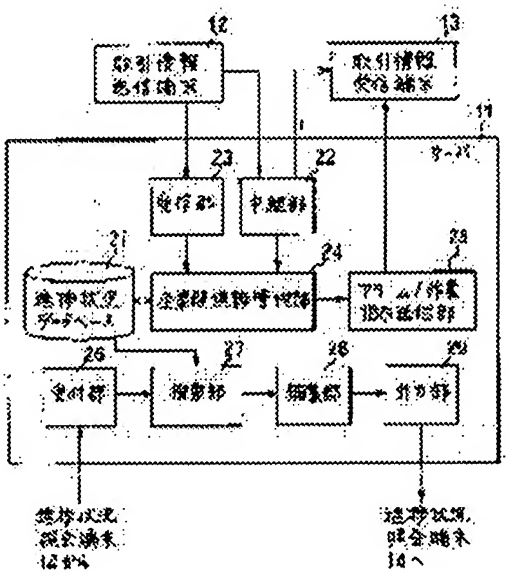
(54) METHOD AND DEVICE FOR MANAGING INTER-COMPANY TRANSACTION PROGRESS

(57)Abstract:

PROBLEM TO BE SOLVED: To perform progress management of transaction or a project in which plural companies work together and participate in accordance with the time of deliver when final products are delivered to a customer.



SOLUTION: A relaying part 22 of a server 11 relays transaction information sent from a transaction information sending terminal 12 of a certain company to a transaction information receiving terminal 13. An inter-company progress managing part 24 expands it into a work schedule that consists of plural work processes and stores it in a progress state database 21 when it receives merchandise order information from the part 22. When the actual results report of a related work process is acquired through the part 22 and a receiving part 23, actual results date is recorded on the schedule and when it is later than a scheduled date, changed date about a subsequent work process is recorded. A retrieving part 27 fetches corresponding progress state from the database 21 in response to an inquiry from a progress state inquiring terminal 14 and sends it to the terminal 14 via an editing part 28 and an outputting part 29.

LEGAL STATUS

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[Number of appeal against examiner's decision of rejection]	2006-005389
[Date of requesting appeal against examiner's decision of rejection]	23.03.2006
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* NOTICES *

1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

DETAILED DESCRIPTION

[Detailed Description of the Invention]
[0001]
[Field of the Invention] This invention relates to the approach and equipment which perform the status control of the activity schedule in which two or more companies participate based on the dealings information transmitted especially among companies with respect to the status-control approach of dealings and equipment using a computer.
[0002]
[Description of the Prior Art] Production control in the single company using a computer and production control of a project are carried out in many companies, and the technique is known well. For example, JP,7-129667,A indicates the production control approach of business of managing a project.
[0003]
[Problem(s) to be Solved by the Invention] There are goods which will need linkage of two or more companies by the time it supplies a customer final products, such as manufacture of components, shipment and the assembly of equipment, and shipment, according to the time for delivery when supplying a final product. Thus, when carrying out the status control of dealings to which two or more companies participate in the bottom of a series of time-for-delivery conditions, or a project until it results [from the routing of the maximum upstream] in delivery of a final product, the production control technique in the same conventional company cannot be applied as it is. That is, it is difficult to access the server in a company of the company where the server which carries out the status control of such dealings between companies is related, and to pull out the data of production control or stock control, and it still more difficult to collect data useful for the status control of the dealings conducted the purpose from a difference of the data format by the company and a coding scheme, or a project. It was difficult to grasp whether the activity to which company is completed about the goods conventionally ordered according to such a situation, and there is any delay to a schedule.
[0004] The purpose of this invention is to solve the above-mentioned conventional trouble, and is to offer the approach and equipment which carry out the status control of the dealings in which two or more companies participate.
[0005]
[Means for Solving the Problem] This invention acquires the dealings information transmitted among companies through a network. It develops on the activity schedule containing two or more routings which cover two or more companies based on this dealings information, and an operation due date. When a track record report of an activity is acquired about this routing, a track record day is recorded on an activity schedule. When a track record day is late for an operation due date, it is characterized by the dealings status-control approach and equipment between the companies which record on a schedule the modification day which corrects the operation due date of a consecutive routing according to delay days. A track record report of an activity [here] shall compare the track record day should match with one of two or more developed routings, and it was reported that was the activity operation due date.
[0006]

[Embodiment of the Invention] Hereafter, 1 operation gestalt of this invention is explained using a drawing.

[0007] Drawing 1 is the status-control structure-of-a-system Fig. of this operation gestalt. It connects with a server 11 through a network 15 with a server 11, and a system consists of the dealings information transmit terminals 12, the dealings information accepting stations 13, and the progress situation enquiry terminals 14 used as a client. The dealings information transmit terminal 12 is installed in one company, and transmits dealings information to a server 11 through a network 15. The dealings information accepting station 13 is installed in other companies, and receives dealings information from a server 11 through a network 15. A server 11 creates the progress situation table of the activity from manufacture of goods to delivery while relaying the dealings information about the order of goods which received from the dealings information transmit terminal 12 to the dealings information accepting station 13, and it manages the progress situation. The progress situation enquiry terminal 14 asks a server 11 the progress situation about specific goods order through a network 15, and acquires progress situation data.

[0008] The dealings information transmit terminal 12, the dealings information accepting station 13, and the progress situation enquiry terminals 14 are information processors, such as a personal computer. Since the name of each terminal unit expresses the function of the application program (AP) performed with the information processor, one information processor can be equipped with two or more functions of these terminals by it. Servers 11 are information processors, such as a personal computer, a workstation, a mainframe computer, and a parallel computer. Networks 15 are networks, such as the Internet which can be used among two or more companies, and a dedicated line which a value added carrier offers.

[0009] Drawing 2 is drawing showing the configuration of the database and functional module which a server 11 holds. The progress situation database 21 is carried out based on order of the goods between companies, and stores the data of the progress situation of activities, such as manufacture of the product covering two or more companies, shipment, and delivery. The junction section 22 is passed to the status-control section 24 between companies while it relays the dealings information received from the dealings information transmit terminal 12 to the dealings information accepting station 13. In addition, the dealings information transmit terminal 12 may transmit the same dealings information to both the dealings information accepting station 13 and the server 11 by broadcast. In that case, the junction section 22 turns into a mere receive section of dealings information. A receive section 23 hands the activity track record data received from transmit terminals, such as the dealings information transmit terminal 12, to the status-control section 24 between companies. The status-control section 24 between companies is the processing section which develops the order dealings information on the goods which received from the junction section 22 in the format of a progress situation table, and is stored in the progress situation database 21. Moreover, the status-control section 24 between companies updates the progress situation table to which the progress situation database 21 corresponds with the dealings information or activity track record data which received from the junction section 22 or a receive section 23. When delay arises on an activity schedule as the result, an alarm / workmanship instruction transmitting section 25 transmits an alarm or workmanship instruction to accepting stations, such as the dealings information accepting station 13 of a related company. The reception section 26 is the processing section which receives progress situation enquiry of dealings from the progress situation enquiry terminal 14. The retrieval section 27 is the processing section which acquires the progress situation table which searches the progress situation database 21 and corresponds. The editorial department 28 is the processing section which edits the acquired progress situation table. The output section 29 is the processing section which transmits the created progress situation data to the progress situation enquiry terminal 14. In addition, a server 11 is able to store AP containing the above-mentioned functional module in a storage, and to read and perform AP on this storage.

[0010] Drawing 3 is drawing showing the example of data of the dealings information 35 transmitted to the dealings information accepting station 13 from the dealings information transmit terminal 12. Drawing 3 (a) is ordering information transmitted to X company from A company, and consists of a

quotient lot number number, quantity, time for delivery, a purchaser, a successful bidder, and an order number. Drawing 3 (b) is shipment information transmitted to Y company from C company, and consists of a quotient lot number number, quantity, time for delivery, a purchaser, a successful bidder, an order number, a shipment number, and an actual ship date. In addition, it can be based on a CII syntax rule and standard format like EDIFACT as a format of dealings information. Moreover, the order number, the quotient lot number number, etc. shall be unified in accordance with the unification criteria of the coding scheme between companies.

[0011] Drawing 4 is drawing showing the configuration of the progress situation data stored in the progress situation database 21. Progress situation data are the schedule table showing a progress situation in order of the activity of the company related about each goods order. A table arranges an order number, a company name, an activity name, an activity operation due date, activity track record Japan, and activity modification Japan in the direction of a train, and arranges the activity of each company concerning the same goods order, and its progress situation in order of an activity to a line writing direction. A company name shows an independent company name or two company names concerning dealings between companies. An order number, a company name, an activity name, and an activity operation due date are data set up by activity expansion at the time of the first goods order. Activity track record Japan and activity modification Japan are data stored using a track record report of a company or the dealings information 35. An activity modification day corrects the activity operation due date of a consecutive routing from a routing with a track record report. For example, the activity track record day is extracted from the dealings information 35 from C company to Y company about shipment for Y company from C company. The alarm and workmanship instruction which are added about each activity show the alarm and workmanship instruction which are transmitted to the company which takes charge of the activity of consecutiveness in connection with activity delay. Since the example of drawing 4 was from C company in shipment for Y company on the 1st, it is shown that delivery for B company will warn of "delivery delay" from Y company for one day to delay and B company which is the company of a destination as the result. Moreover, directing "lead-time compaction" to B company is shown instead of changing the production schedule of B company. Moreover, since there is a possibility that "urgent shipment" may be directed to X company and shipment for A company may be overdue from X company since there is a possibility that the shipment for X company from B company may be overdue, warning of "those of delivery delay with fear" to A company is shown. The contents of an alarm and workmanship instruction prepare a pattern according to the class and delay days of an activity. Although an alarm and workmanship instruction did not need to be registered into the progress situation database 21, since it generated corresponding to each activity, it stood in a row with the progress situation of each activity for convenience, and was shown.

[0012] In addition, a production process may be included in it using the shipment dealings information of -Y C company and a B company-X company, without preparing the production process of an independent company like C company and B company. "Shipment" means the turnover of the goods in the case of being accompanied by manufacture, and "delivery" means the turnover of the goods when not being accompanied by manufacture like [when going via a dealer or a trading company]. In addition, in the complicated activity schedule which two or more routings stand in a row and advance, assembles the components manufactured in each company, assembles a final product, and is supplied to a purchaser, one goods order can be similarly developed on a progress situation table, and the example of drawing 4 can set up activity track record Japan and activity modification Japan using a track record report of a company or the dealings information 35, although a routing is the simple example connected to a serial.

[0013] Drawing 5 is a flow chart which shows the flow of processing of the status-control section 24 between companies of a server 11, and the alarm / workmanship instruction transmitting section 25. If the dealings information 35 or activity track record data is received from the junction section 22 or a receive section 23 (step 51), the status-control section 24 between companies will search the progress situation database 21 by the order number (step 52), and will judge whether it is the dealings information on the new goods order which is not registered into the progress situation database 21 (step

53). If it is new goods order (step 53 YES), activity expansion of the company name, activity name, and standard operation days which were beforehand set as the store will be carried out as a schedule of a prototype (step 54), it will register with the progress situation database 21 (step 55), and processing will be ended. The successful-bidder-purchaser contained in ordering information is set up as a company name of the last delivery activity or shipment, and the time for delivery of goods sets up as an activity operation due date of the last delivery activity or shipment. If it is not new goods order (step 53 NO), it will judge whether they are the company dealings information on registered goods order, or an activity track record report (step 56). If it is the dealings information / track record report of ordered goods (step 56 YES), the activity track record day of an activity when the order number concerned corresponds to a progress situation table is set up, and when modification arises by it at an activity operation due date, according to the delay days, a modification day will be set up on an activity modification day (step 57). Next, the progress situation database 21 is updated on the created progress situation table (step 58). As a result of processing of step 57, when an activity track record day is not late for an activity operation due date, (step 59NO) and processing are ended. When time-for-delivery delay arises, an order number, an activity name, an alarm, or workmanship instruction is transmitted to the accepting station of the company where (step 59YES) and control are related according to the alarm by which an alarm / workmanship instruction transmitting section 25 was beforehand set up over an alarm / workmanship instruction transmitting section 25, and the pattern of workmanship instruction (step 60). Processing will be ended if not related to the progress situation of the order goods the dealings information received from the transmit terminal or whose information in a company has been registered (step 56 NO). In addition, when not preparing the production process of an independent company into a progress situation table, it is only the company dealings information that there is no information from a receive section 23 in the information inputted into the status-control section 24 between companies, and it is inputted from the junction section 22.

[0014] In addition, there is an inventory of components in the case of activity expansion of step 54, it can respond to those without /, and a respectively different activity prototype can be adopted. For example, what is necessary is just to start an activity prototype from manufacture of B company, if the information that it has an inventory of the components corresponding to the quantity of the goods with which B company was ordered in the example shown in drawing 4 is acquired. A server 11 holds the newest components inventory information of B company, or it can ask the server of B company and it can acquire it.

[0015] Drawing 6 is drawing showing the example of data of the progress situation enquiry 65 transmitted to a server 11 from the progress situation enquiry terminal 14. The progress situation enquiry 65 consists of an order number, a purchaser, a successful bidder, and information like time for delivery.

[0016] Drawing 7 is drawing showing the example of data of the progress situation data 75 which it is as a result of [which is transmitted to the progress situation enquiry terminal 14 from a server 11] enquiry. The progress situation data 75 edit the progress situation table of the specified order number into the format of the table where people are legible. In addition, it is also possible to edit into the format of a production control Fig. which expresses a progress situation table, using a graphic form as progress situation data.

[0017] Drawing 8 is a flow chart which shows the flow of processing from the reception section 26 of a server 11 to the output section 29. The reception section 26 receives the progress situation enquiry 65 from the progress situation enquiry terminal 14 (step 81), and the retrieval section 27 takes out the progress situation table of the order number which searched the progress situation database 21 and was specified (step 82). The editorial department 28 edits the acquired progress situation table into the format of the progress situation data 75 (step 83), and the output section 29 transmits the created progress situation data 75 to the progress situation enquiry terminal 14 (step 84).

[0018] In addition, the server in a company may relay the dealings information transmitted from the dealings information transmit terminal 12 within the corporate information system of each company, it may transmit to the dealings information accepting station 13, and dealings information may transmit

from the server of each company in a company to a server 11 instead of catching the dealings information transmitted to the dealings information accepting station 13 from each dealings information transmit terminal 12, and registering a progress situation table into the progress situation database 21, or a server 11 updating.

[0019]

[Effect of the Invention] Since a status control integrative about the dealings in which two or more companies participate is performed according to this invention as explained above, the progress situation can be grasped immediately.

[Translation done.]

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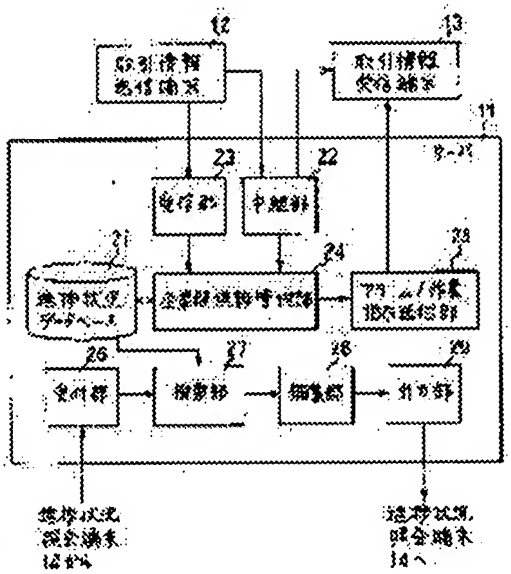
(57)Abstract:

PROBLEM TO BE SOLVED: To perform progress management of transaction or a project in which plural companies work together and participate in accordance with the time of deliver when final products are delivered to a customer.

SOLUTION: A relaying part 22 of a server 11 relays transaction information sent from a transaction information sending terminal 12 of a certain company to a transaction information receiving terminal 13. An inter-company progress managing part 24 expands it into a work schedule that consists of plural work processes and stores it in a progress state database 21 when it receives merchandise order information from the part 22. When the actual results report of a related work process is acquired through the part 22 and a receiving part 23, actual results date is recorded on the schedule and when it is later than a scheduled date, changed date about a subsequent work process is recorded. A retrieving part 27 fetches corresponding progress state from the database 21 in response to an inquiry from a progress state inquiring terminal 14 and sends it to the terminal 14 via an editing part 28 and an outputting part 29.



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[Description of the Prior Art] Production control in the single company using a computer and production control of a project are carried out in many companies, and the technique is known well. For example, JP,7-129667,A indicates the production control approach of business of managing a project.
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[Problem(s) to be Solved by the Invention] There are goods which will need linkage of two or more companies by the time it supplies a customer final products, such as manufacture of components, shipment and the assembly of equipment, and shipment, according to the time for delivery when supplying a final product. Thus, when carrying out the status control of dealings to which two or more companies participate in the bottom of a series of time-for-delivery conditions, or a project until it results [from the routing of the maximum upstream] in delivery of a final product, the production control technique in the same conventional company cannot be applied as it is. That is, it is difficult to access the server in a company of the company where the server which carries out the status control of such dealings between companies is related, and to pull out the data of production control or stock control, and it still more difficult to collect data useful for the status control of the dealings conducted the purpose from a difference of the data format by the company and a coding scheme, or a project. It was difficult to grasp whether the activity to which company is completed about the goods conventionally ordered according to such a situation, and there is any delay to a schedule.
[0004] The purpose of this invention is to solve the above-mentioned conventional trouble, and is to offer the approach and equipment which carry out the status control of the dealings in which two or more companies participate.
[0005]
[Means for Solving the Problem] This invention acquires the dealings information transmitted among companies through a network. It develops on the activity schedule containing two or more routings which cover two or more companies based on this dealings information, and an operation due date. When a track record report of an activity is acquired about this routing, a track record day is recorded on an activity schedule. When a track record day is late for an operation due date, it is characterized by the dealings status-control approach and equipment between the companies which record on a schedule the modification day which corrects the operation due date of a consecutive routing according to delay days. A track record report of an activity [here] shall compare the track record day should match with one of two or more developed routings, and it was reported that was the activity operation due date.
[0006]

[Embodiment of the Invention] Hereafter, 1 operation gestalt of this invention is explained using a drawing.

[0007] Drawing 1 is the status-control structure-of-a-system Fig. of this operation gestalt. It connects with a server 11 through a network 15 with a server 11, and a system consists of the dealings information transmit terminals 12, the dealings information accepting stations 13, and the progress situation enquiry terminals 14 used as a client. The dealings information transmit terminal 12 is installed in one company, and transmits dealings information to a server 11 through a network 15. The dealings information accepting station 13 is installed in other companies, and receives dealings information from a server 11 through a network 15. A server 11 creates the progress situation table of the activity from manufacture of goods to delivery while relaying the dealings information about the order of goods which received from the dealings information transmit terminal 12 to the dealings information accepting station 13, and it manages the progress situation. The progress situation enquiry terminal 14 asks a server 11 the progress situation about specific goods order through a network 15, and acquires progress situation data.

[0008] The dealings information transmit terminal 12, the dealings information accepting station 13, and the progress situation enquiry terminals 14 are information processors, such as a personal computer. Since the name of each terminal unit expresses the function of the application program (AP) performed with the information processor, one information processor can be equipped with two or more functions of these terminals by it. Servers 11 are information processors, such as a personal computer, a workstation, a mainframe computer, and a parallel computer. Networks 15 are networks, such as the Internet which can be used among two or more companies, and a dedicated line which a value added carrier offers.

[0009] Drawing 2 is drawing showing the configuration of the database and functional module which a server 11 holds. The progress situation database 21 is carried out based on order of the goods between companies, and stores the data of the progress situation of activities, such as manufacture of the product covering two or more companies, shipment, and delivery. The junction section 22 is passed to the status-control section 24 between companies while it relays the dealings information received from the dealings information transmit terminal 12 to the dealings information accepting station 13. In addition, the dealings information transmit terminal 12 may transmit the same dealings information to both the dealings information accepting station 13 and the server 11 by broadcast. In that case, the junction section 22 turns into a mere receive section of dealings information. A receive section 23 hands the activity track record data received from transmit terminals, such as the dealings information transmit terminal 12, to the status-control section 24 between companies. The status-control section 24 between companies is the processing section which develops the order dealings information on the goods which received from the junction section 22 in the format of a progress situation table, and is stored in the progress situation database 21. Moreover, the status-control section 24 between companies updates the progress situation table to which the progress situation database 21 corresponds with the dealings information or activity track record data which received from the junction section 22 or a receive section 23. When delay arises on an activity schedule as the result, an alarm / workmanship instruction transmitting section 25 transmits an alarm or workmanship instruction to accepting stations, such as the dealings information accepting station 13 of a related company. The reception section 26 is the processing section which receives progress situation enquiry of dealings from the progress situation enquiry terminal 14. The retrieval section 27 is the processing section which acquires the progress situation table which searches the progress situation database 21 and corresponds. The editorial department 28 is the processing section which edits the acquired progress situation table. The output section 29 is the processing section which transmits the created progress situation data to the progress situation enquiry terminal 14. In addition, a server 11 is able to store AP containing the above-mentioned functional module in a storage, and to read and perform AP on this storage.

[0010] Drawing 3 is drawing showing the example of data of the dealings information 35 transmitted to the dealings information accepting station 13 from the dealings information transmit terminal 12. Drawing 3 (a) is ordering information transmitted to X company from A company, and consists of a

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[0013] Drawing 5 is a flow chart which shows the flow of processing of the status-control section 24 between companies of a server 11, and the alarm / workmanship instruction transmitting section 25. If the dealings information 35 or activity track record data is received from the junction section 22 or a receive section 23 (step 51), the status-control section 24 between companies will search the progress situation database 21 by the order number (step 52), and will judge whether it is the dealings information on the new goods order which is not registered into the progress situation database 21 (step

53). If it is new goods order (step 53 YES), activity expansion of the company name, activity name, and standard operation days which were beforehand set as the store will be carried out as a schedule of a prototype (step 54), it will register with the progress situation database 21 (step 55), and processing will be ended. The successful-bidder-purchaser contained in ordering information is set up as a company name of the last delivery activity or shipment, and the time for delivery of goods sets up as an activity operation due date of the last delivery activity or shipment. If it is not new goods order (step 53 NO), it will judge whether they are the company dealings information on registered goods order, or an activity track record report (step 56). If it is the dealings information / track record report of ordered goods (step 56 YES), the activity track record day of an activity when the order number concerned corresponds to a progress situation table is set up, and when modification arises by it at an activity operation due date, according to the delay days, a modification day will be set up on an activity modification day (step 57). Next, the progress situation database 21 is updated on the created progress situation table (step 58). As a result of processing of step 57, when an activity track record day is not late for an activity operation due date, (step 59NO) and processing are ended. When time-for-delivery delay arises, an order number, an activity name, an alarm, or workmanship instruction is transmitted to the accepting station of the company where (step 59YES) and control are related according to the alarm by which an alarm / workmanship instruction transmitting section 25 was beforehand set up over an alarm / workmanship instruction transmitting section 25, and the pattern of workmanship instruction (step 60). Processing will be ended if not related to the progress situation of the order goods the dealings information received from the transmit terminal or whose information in a company has been registered (step 56 NO). In addition, when not preparing the production process of an independent company into a progress situation table, it is only the company dealings information that there is no information from a receive section 23 in the information inputted into the status-control section 24 between companies, and it is inputted from the junction section 22.

[0014] In addition, there is an inventory of components in the case of activity expansion of step 54, it can respond to those without /, and a respectively different activity prototype can be adopted. For example, what is necessary is just to start an activity prototype from manufacture of B company, if the information that it has an inventory of the components corresponding to the quantity of the goods with which B company was ordered in the example shown in drawing 4 is acquired. A server 11 holds the newest components inventory information of B company, or it can ask the server of B company and it can acquire it.

[0015] Drawing 6 is drawing showing the example of data of the progress situation enquiry 65 transmitted to a server 11 from the progress situation enquiry terminal 14. The progress situation enquiry 65 consists of an order number, a purchaser, a successful bidder, and information like time for delivery.

[0016] Drawing 7 is drawing showing the example of data of the progress situation data 75 which it is as a result of [which is transmitted to the progress situation enquiry terminal 14 from a server 11] enquiry. The progress situation data 75 edit the progress situation table of the specified order number into the format of the table where people are legible. In addition, it is also possible to edit into the format of a production control Fig. which expresses a progress situation table, using a graphic form as progress situation data.

[0017] Drawing 8 is a flow chart which shows the flow of processing from the reception section 26 of a server 11 to the output section 29. The reception section 26 receives the progress situation enquiry 65 from the progress situation enquiry terminal 14 (step 81), and the retrieval section 27 takes out the progress situation table of the order number which searched the progress situation database 21 and was specified (step 82). The editorial department 28 edits the acquired progress situation table into the format of the progress situation data 75 (step 83), and the output section 29 transmits the created progress situation data 75 to the progress situation enquiry terminal 14 (step 84).

[0018] In addition, the server in a company may relay the dealings information transmitted from the dealings information transmit terminal 12 within the corporate information system of each company, it may transmit to the dealings information accepting station 13, and dealings information may transmit

from the server of each company in a company to a server 11 instead of catching the dealings information transmitted to the dealings information accepting station 13 from each dealings information transmit terminal 12, and registering a progress situation table into the progress situation database 21, or a server 11 updating.

[0019]

[Effect of the Invention] Since a status control integrative about the dealings in which two or more companies participate is performed according to this invention as explained above, the progress situation can be grasped immediately.

[Translation done.]

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TECHNICAL FIELD

[Field of the Invention] This invention relates to the approach and equipment which perform the status control of the activity schedule in which two or more companies participate based on the dealings information transmitted especially among companies with respect to the status-control approach of dealings and equipment using a computer.

[Translation done.]

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PRIOR ART

[Description of the Prior Art] Production control in the single company using a computer and production control of a project are carried out in many companies, and the technique is known well. For example, JP,7-129667,A indicates the production control approach of business of managing a project.

[Translation done.]

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EFFECT OF THE INVENTION

[Effect of the Invention] Since a status control integrative about the dealings in which two or more companies participate is performed according to this invention as explained above, the progress situation can be grasped immediately.

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TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention] There are goods which will need linkage of two or more companies by the time it supplies a customer final products, such as manufacture of components, shipment and the assembly of equipment, and shipment, according to the time for delivery when supplying a final product. Thus, when carrying out the status control of dealings to which two or more companies participate in the bottom of a series of time-for-delivery conditions, or a project until it results [from the routing of the maximum upstream] in delivery of a final product, the production control technique in the same conventional company cannot be applied as it is. That is, it is difficult to access the server in a company of the company where the server which carries out the status control of such dealings between companies is related, and to pull out the data of production control or stock control, and it still more difficult to collect data useful for the status control of the dealings conducted the purpose from a difference of the data format by the company and a coding scheme, or a project. It was difficult to grasp whether the activity to which company is completed about the goods conventionally ordered according to such a situation, and there is any delay to a schedule.
[0004] The purpose of this invention is to solve the above-mentioned conventional trouble, and is to offer the approach and equipment which carry out the status control of the dealings in which two or more companies participate.

[Translation done.]

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MEANS

[Means for Solving the Problem] This invention acquires the dealings information transmitted among companies through a network. It develops on the activity schedule containing two or more routings which cover two or more companies based on this dealings information, and an operation due date. When a track record report of an activity is acquired about this routing, a track record day is recorded on an activity schedule. When a track record day is late for an operation due date, it is characterized by the dealings status-control approach and equipment between the companies which record on a schedule the modification day which corrects the operation due date of a consecutive routing according to delay days. A track record report of an activity [here] shall compare the track record day should match with one of two or more developed routings, and it was reported that was the activity operation due date.
[0006]
[Embodiment of the Invention] Hereafter, 1 operation gestalt of this invention is explained using a drawing.
[0007] Drawing 1 is the status-control structure-of-a-system Fig. of this operation gestalt. It connects with a server 11 through a network 15 with a server 11, and a system consists of the dealings information transmit terminals 12, the dealings information accepting stations 13, and the progress situation enquiry terminals 14 used as a client. The dealings information transmit terminal 12 is installed in one company, and transmits dealings information to a server 11 through a network 15. The dealings information accepting station 13 is installed in other companies, and receives dealings information from a server 11 through a network 15. A server 11 creates the progress situation table of the activity from manufacture of goods to delivery while relaying the dealings information about the order of goods which received from the dealings information transmit terminal 12 to the dealings information accepting station 13, and it manages the progress situation. The progress situation enquiry terminal 14 asks a server 11 the progress situation about specific goods order through a network 15, and acquires progress situation data.
[0008] The dealings information transmit terminal 12, the dealings information accepting station 13, and the progress situation enquiry terminals 14 are information processors, such as a personal computer. Since the name of each terminal unit expresses the function of the application program (AP) performed with the information processor, one information processor can be equipped with two or more functions of these terminals by it. Servers 11 are information processors, such as a personal computer, a workstation, a mainframe computer, and a parallel computer. Networks 15 are networks, such as the Internet which can be used among two or more companies, and a dedicated line which a value added carrier offers.
[0009] Drawing 2 is drawing showing the configuration of the database and functional module which a server 11 holds. The progress situation database 21 is carried out based on order of the goods between companies, and stores the data of the progress situation of activities, such as manufacture of the product covering two or more companies, shipment, and delivery. The junction section 22 is passed to the status-control section 24 between companies while it relays the dealings information received from the dealings information transmit terminal 12 to the dealings information accepting station 13. In addition,

the dealings information transmit terminal 12 may transmit the same dealings information to both the dealings information accepting station 13 and the server 11 by broadcast. In that case, the junction section 22 turns into a mere receive section of dealings information. A receive section 23 hands the activity track record data received from transmit terminals, such as the dealings information transmit terminal 12, to the status-control section 24 between companies. The status-control section 24 between companies is the processing section which develops the order dealings information on the goods which received from the junction section 22 in the format of a progress situation table, and is stored in the progress situation database 21. Moreover, the status-control section 24 between companies updates the progress situation table to which the progress situation database 21 corresponds with the dealings information or activity track record data which received from the junction section 22 or a receive section 23. When delay arises on an activity schedule as the result, an alarm / workmanship instruction transmitting section 25 transmits an alarm or workmanship instruction to accepting stations, such as the dealings information accepting station 13 of a related company. The reception section 26 is the processing section which receives progress situation enquiry of dealings from the progress situation enquiry terminal 14. The retrieval section 27 is the processing section which acquires the progress situation table which searches the progress situation database 21 and corresponds. The editorial department 28 is the processing section which edits the acquired progress situation table. The output section 29 is the processing section which transmits the created progress situation data to the progress situation enquiry terminal 14. In addition, a server 11 is able to store AP containing the above-mentioned functional module in a storage, and to read and perform AP on this storage.

[0010] Drawing 3 is drawing showing the example of data of the dealings information 35 transmitted to the dealings information accepting station 13 from the dealings information transmit terminal 12. Drawing 3 (a) is ordering information transmitted to X company from A company, and consists of a quotient lot number number, quantity, time for delivery, a purchaser, a successful bidder, and an order number. Drawing 3 (b) is shipment information transmitted to Y company from C company, and consists of a quotient lot number number, quantity, time for delivery, a purchaser, a successful bidder, an order number, a shipment number, and an actual ship date. In addition, it can be based on a CII syntax rule and standard format like EDIFACT as a format of dealings information. Moreover, the order number, the quotient lot number number, etc. shall be unified in accordance with the unification criteria of the coding scheme between companies.

[0011] Drawing 4 is drawing showing the configuration of the progress situation data stored in the progress situation database 21. Progress situation data are the schedule table showing a progress situation in order of the activity of the company related about each goods order. A table arranges an order number, a company name, an activity name, an activity operation due date, activity track record Japan, and activity modification Japan in the direction of a train, and arranges the activity of each company concerning the same goods order, and its progress situation in order of an activity to a line writing direction. A company name shows an independent company name or two company names concerning dealings between companies. An order number, a company name, an activity name, and an activity operation due date are data set up by activity expansion at the time of the first goods order. Activity track record Japan and activity modification Japan are data stored using a track record report of a company or the dealings information 35. An activity modification day corrects the activity operation due date of a consecutive routing from a routing with a track record report. For example, the activity track record day is extracted from the dealings information 35 from C company to Y company about shipment for Y company from C company. The alarm and workmanship instruction which are added about each activity show the alarm and workmanship instruction which are transmitted to the company which takes charge of the activity of consecutiveness in connection with activity delay. Since the example of drawing 4 was from C company in shipment for Y company on the 1st, it is shown that delivery for B company will warn of "delivery delay" from Y company for one day to delay and B company which is the company of a destination as the result. Moreover, directing "lead-time compaction" to B company is shown instead of changing the production schedule of B company. Moreover, since there is a possibility that "urgent shipment" may be directed to X company and

shipment for A company may be overdue from X company since there is a possibility that the shipment for X company from B company may be overdue, warning of "those of delivery delay with fear" to A company is shown. The contents of an alarm and workmanship instruction prepare a pattern according to the class and delay days of an activity. Although an alarm and workmanship instruction did not need to be registered into the progress situation database 21, since it generated corresponding to each activity, it stood in a row with the progress situation of each activity for convenience, and was shown.

[0012] In addition, a production process may be included in it using the shipment dealings information of -Y C company and a B company-X company, without preparing the production process of an independent company like C company and B company. "Shipment" means the turnover of the goods in the case of being accompanied by manufacture, and "delivery" means the turnover of the goods when not being accompanied by manufacture like [when going via a dealer or a trading company]. In addition, in the complicated activity schedule which two or more routings stand in a row and advance, assembles the components manufactured in each company, assembles a final product, and is supplied to a purchaser, one goods order can be similarly developed on a progress situation table, and the example of drawing 4 can set up activity track record Japan and activity modification Japan using a track record report of a company or the dealings information 35, although a routing is the simple example connected to a serial.

[0013] Drawing 5 is a flow chart which shows the flow of processing of the status-control section 24 between companies of a server 11, and the alarm / workmanship instruction transmitting section 25. If the dealings information 35 or activity track record data is received from the junction section 22 or a receive section 23 (step 51), the status-control section 24 between companies will search the progress situation database 21 by the order number (step 52), and will judge whether it is the dealings information on the new goods order which is not registered into the progress situation database 21 (step 53). If it is new goods order (step 53 YES), activity expansion of the company name, activity name, and standard operation days which were beforehand set as the store will be carried out as a schedule of a prototype (step 54), it will register with the progress situation database 21 (step 55), and processing will be ended. The successful-bidder-purchaser contained in ordering information is set up as a company name of the last delivery activity or shipment, and the time for delivery of goods sets up as an activity operation due date of the last delivery activity or shipment. If it is not new goods order (step 53 NO), it will judge whether they are the company dealings information on registered goods order, or an activity track record report (step 56). If it is the dealings information / track record report of ordered goods (step 56 YES), the activity track record day of an activity when the order number concerned corresponds to a progress situation table is set up, and when modification arises by it at an activity operation due date, according to the delay days, a modification day will be set up on an activity modification day (step 57). Next, the progress situation database 21 is updated on the created progress situation table (step 58). As a result of processing of step 57, when an activity track record day is not late for an activity operation due date, (step 59NO) and processing are ended. When time-for-delivery delay arises, an order number, an activity name, an alarm, or workmanship instruction is transmitted to the accepting station of the company where (step 59YES) and control are related according to the alarm by which an alarm / workmanship instruction transmitting section 25 was beforehand set up over an alarm / workmanship instruction transmitting section 25, and the pattern of workmanship instruction (step 60). Processing will be ended if not related to the progress situation of the order goods the dealings information received from the transmit terminal or whose information in a company has been registered (step 56 NO). In addition, when not preparing the production process of an independent company into a progress situation table, it is only the company dealings information that there is no information from a receive section 23 in the information inputted into the status-control section 24 between companies, and it is inputted from the junction section 22.

[0014] In addition, there is an inventory of components in the case of activity expansion of step 54, it can respond to those without /, and a respectively different activity prototype can be adopted. For example, what is necessary is just to start an activity prototype from manufacture of B company, if the information that it has an inventory of the components corresponding to the quantity of the goods with

which B company was ordered in the example shown in drawing 4 is acquired. A server 11 holds the newest components inventory information of B company, or it can ask the server of B company and it can acquire it.

[0015] Drawing 6 is drawing showing the example of data of the progress situation enquiry 65 transmitted to a server 11 from the progress situation enquiry terminal 14. The progress situation enquiry 65 consists of an order number, a purchaser, a successful bidder, and information like time for delivery.

[0016] Drawing 7 is drawing showing the example of data of the progress situation data 75 which it is as a result of [which is transmitted to the progress situation enquiry terminal 14 from a server 11] enquiry. The progress situation data 75 edit the progress situation table of the specified order number into the format of the table where people are legible. In addition, it is also possible to edit into the format of a production control Fig. which expresses a progress situation table, using a graphic form as progress situation data.

[0017] Drawing 8 is a flow chart which shows the flow of processing from the reception section 26 of a server 11 to the output section 29. The reception section 26 receives the progress situation enquiry 65 from the progress situation enquiry terminal 14 (step 81), and the retrieval section 27 takes out the progress situation table of the order number which searched the progress situation database 21 and was specified (step 82). The editorial department 28 edits the acquired progress situation table into the format of the progress situation data 75 (step 83), and the output section 29 transmits the created progress situation data 75 to the progress situation enquiry terminal 14 (step 84).

[0018] In addition, the server in a company may relay the dealings information transmitted from the dealings information transmit terminal 12 within the corporate information system of each company, it may transmit to the dealings information accepting station 13, and dealings information may transmit from the server of each company in a company to a server 11 instead of catching the dealings information transmitted to the dealings information accepting station 13 from each dealings information transmit terminal 12, and registering a progress situation table into the progress situation database 21, or a server 11 updating.

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]
[Drawing 1] It is drawing showing the structure of a system of an operation gestalt.
[Drawing 2] It is drawing showing the internal configuration of the server 11 of an operation gestalt.
[Drawing 3] It is drawing showing the example of data of the dealings information 35.
[Drawing 4] It is drawing showing the data configuration of the progress situation database 21 of an operation gestalt.
[Drawing 5] It is the flow chart which shows the flow of processing of the status-control section 24 between companies of an operation gestalt, and the alarm / workmanship instruction transmitting section 25.
[Drawing 6] It is drawing showing the example of data of the progress situation enquiry 65.
[Drawing 7] It is drawing showing the example of data of the progress situation data 75.
[Drawing 8] It is the flow chart which shows the flow of processing of progress situation inquiry processing of an operation gestalt.
[Description of Notations]
11: A server, 12:dealings information transmit terminal, 13:dealings information accepting station, 14:progress situation enquiry terminal, 21:progress situation database, the status-control section between 24:companies, 35 : dealings information

[Translation done.]

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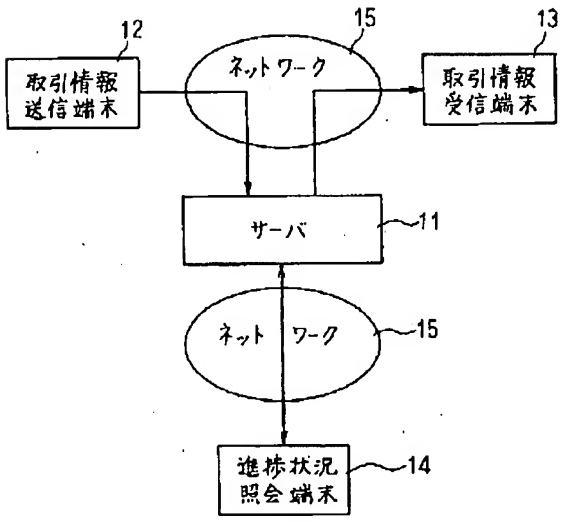
DRAWINGS

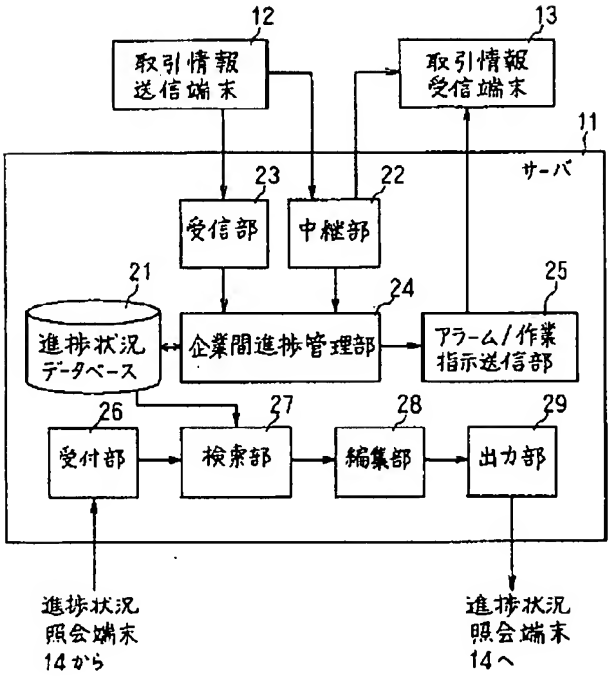
[Drawing 1]

図 1



[Drawing 2]

図2



[Drawing 3]

図3

(a)

~35：取引情報

発注データ	
商品番号	PC1010
数量	100
納期	11月20日
発注者	A社
受注者	X社
発注NO	H1001

(b)

~35：取引情報

出荷データ	
商品番号	PC1010
数量	100
納期	11月14日
発注者	C社
受注者	Y社
発注NO	H1001
出荷NO	S1001
出荷日	11月15日

[Drawing 4]

図4

21：進捗状況データベース

発注NO	企業名	作業名(作業NO)	作業完了予定日	作業実績日	作業変更日	アラーム	作業指示
H1001	C	製造(P1001)	11/14	11/14	－	－	－
H1001	C－Y	出荷(S1001)	11/14	11/15	－	－	
H1001	Y－B	納入	11/15	－	11/16	納入遅れ	－
H1001	B	製造	11/18	－		－	リードタイム短縮
H1001	B－X	出荷	11/19		－	－	緊急出荷
H1001	X－A	納入	11/20	－		納入遅れのおそれあり	－

[Drawing 6]

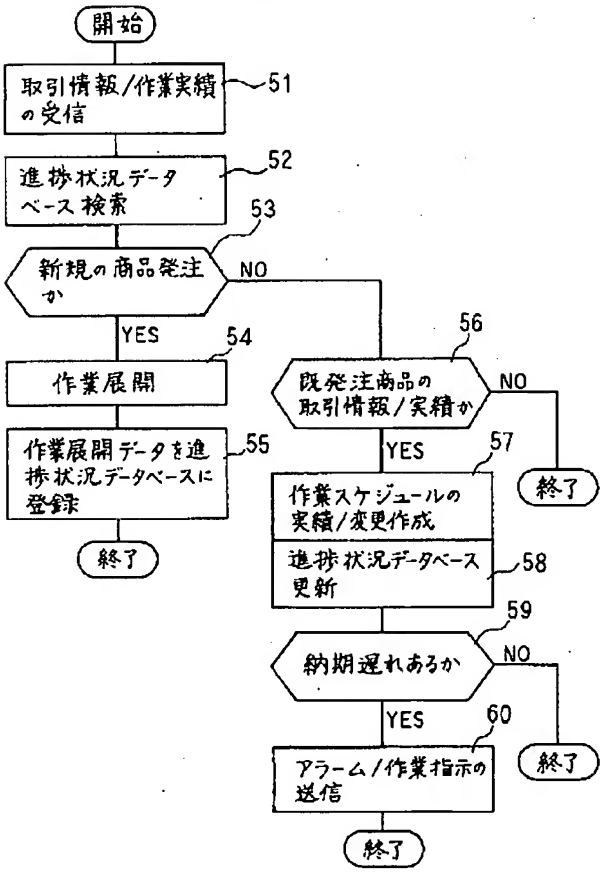
図6

65：進捗状況照会

発注NO	H1001
発注者	A社
受注者	X社
納期	11月20日

[Drawing 5]

図5



[Drawing 7]

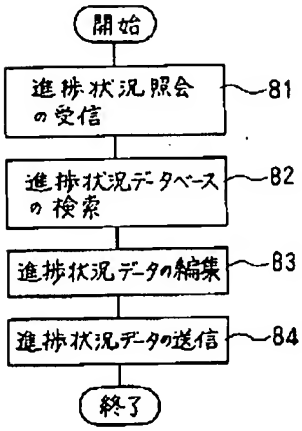
図7

～75：進捗状況データ

	A社	X社	B社		Y社	C社
	納入	出荷	製造	納入	出荷	製造
予定	11/20	11/19	11/18	11/15	11/14	11/14
実績					11/15	11/14
変更予定日				11/16		

[Drawing 8]

図8



[Translation done.]